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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,688	06/27/2005	Alan Roddis	00952/0202318-US0	9784
7278	7590	04/30/2008		
DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER PATEL, VISHAL A	
			ART UNIT 3676	PAPER NUMBER
			MAIL DATE 04/30/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,688	Applicant(s) RODDIS, ALAN	
	Examiner Vishal Patel	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-7,9,11,12,16,37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-7,9,11,12,16,37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/24/08 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 5-7, 9, 11-12, 16, 37-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1, lines 15-18, "which is positioned...face member.", unclear how many members applicant is claiming? As mentioned applicant has claimed "said floating stationary seal face members" and "said stationary seal face members", which makes four face members. This is also not provided in the specification and drawings. For examination purpose there are two floating stationary seal face members.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 7, 16 and 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Whitford (US. 5,064,205).

Whitford discloses a mechanical seal having an axially fixed rotary seal face member (e.g. 2) providing two axially separated and oppositely facing seal faces (e.g. seal faces of 2 that are facing 3 and 4), first and second axially floating stationary seal face members (e.g. 3 and 4, column 2, lines 49-51) arranged on axially opposite sides of the rotary seal face member and each having a seal face (e.g. face of 3 and 4 facing 2) and means (e.g. means 5-8) for magnetically biasing the floating seal face members towards the rotary seal face members, the axially floating seal face members and the biasing means being rotationally fixed relative to each other and the axially fixed seal face member being free to rotate relative (e.g. 2 is free to rotate relative to 3 and 4) to the axially floating seal face members (e.g. 3 and 4). The magnetic biasing means comprises one or more magnets (e.g. 5-8) each of which is positioned so as to attract both the axially floating stationary seal face members (e.g. 3 and 4).

Regarding claim 7 and 16: The biasing means comprises two or more magnets (e.g. magnets 7 and 8 or magnets 5 and 6 circumferentially separated by a spacing element (spacing element between 7 and 8 or 5 and 6)).

Regarding claims 16 and 37: The housing is provided with a radially extending hole (e.g. hole that is capable of receiving shaft 1) connecting the outermost and innermost surfaces of the

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housing. The seal is capable of being used as a bearing protector (evidence is shown by Adams et al).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 5-7, 9, 11-12, 16 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laney (US. 6,109,617) in view of Dawson et al (US. 6,805,358).

Laney discloses a mechanical seal having a first rotary seal face member (e.g. 16) having two seal faces opposite each other (e.g. faces 18 and 22), two floating stationary seal face members (e.g. 20 and 30), a housing having holes (e.g. 11) that connect inner most portion of the housing to an outer most portion of the housing, a seal face holders (e.g. holders 12 and 10) for the floating seal face members and the seal face holders having means (means 60 and 62) for biasing the floating seal face members toward the rotary seal face member. The biasing means 62 and 60 operate independently.

Laney fails to disclose that the biasing means are magnets and are held in a housing. Dawson discloses that a mechanical seal having a housing (e.g. 10) holding stationary seal face member (12), the housing have holes to hold magnets (61), a rotary seal face member (e.g. 80) the magnet is the biasing means to attract seal faces of the seal face members. The housing have a shoulder (e.g. shoulder formed by holes 60 that retain the magnets and the magnets are flush with the shoulder as seen in figures 2-3). The magnets are mounted radially outwards of the seal

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face member (e.g. 12). The seal includes a magnetically insulating member (e.g. 77) located between the biasing means and the axially fixed seal face member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the seal face holder and the biasing means in the seal face holder of Laney be replaced by the biasing means of Dawson, since replacing one biasing means by another biasing means that provides same function would provide predictable results and to provide seal faces that do not get damage during installation (column 2, lines 4-5 of Dawson).

Regarding claim 9: The holder having magnets of Dawson that replaces the holder 12 of Laney would inherently attract the floating seal face members, where the radial end of the magnet would attract the seal face member 30 and the axial end that is perpendicular to the radial end would attract the seal face member 20.

Response to Arguments

9. Applicant's arguments filed 3/24/08 have been fully considered but they are not persuasive.

Applicants' argument that the claim 16 is directed to a sub-combination is noted and the 112 second paragraph rejection is withdrawn.

Applicants' argument that the reference of Whitford does not disclose a mechanical seal having a slide contact between the seal faces is not persuasive because applicant does not claim this (e.g. claim 1, lines 7-8, "each having a seal face for effecting sliding contact with a respective seal face of the rotary seal face member").

Even if applicant claims that the face are contacting, the reference of Whitford discloses that the gap between the stator and the rotor can be controlled to limit leakage (e.g. column 2,

lines 21-23, “the circuitry...leakage control”, if one wants minimum leakage one would provide contact between the rotor 2 and the stators 3 and 4).

Applicants’ argument that the improvement provided by Dawson would repel the stationary rings is not persuasive because the spring 60 and 62 work independently and one would replace magnets that would function independently (e.g. a magnet in 12 would make the first axially floating stationary seal face 20 bias toward the rotary seal face member 16 and a magnet in 10 would make the second axially floating stationary seal face 30 bias toward the rotary seal face member 16). Furthermore more applicant has not claimed any particular configuration of magnets and elements that are used in conjunction with the magnets.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./

Primary Examiner, Art Unit 3676

/Vishal Patel/

Primary Examiner, Art Unit 3676